

Annex

The process of the present report represents a reworking of the process disclosed in US 6,017,567 (= EP 0 813 817) and a comparison with the subject of the current patent application.

1. Production of hard coating according to US 6,017,567 (= EP 0 813 817)

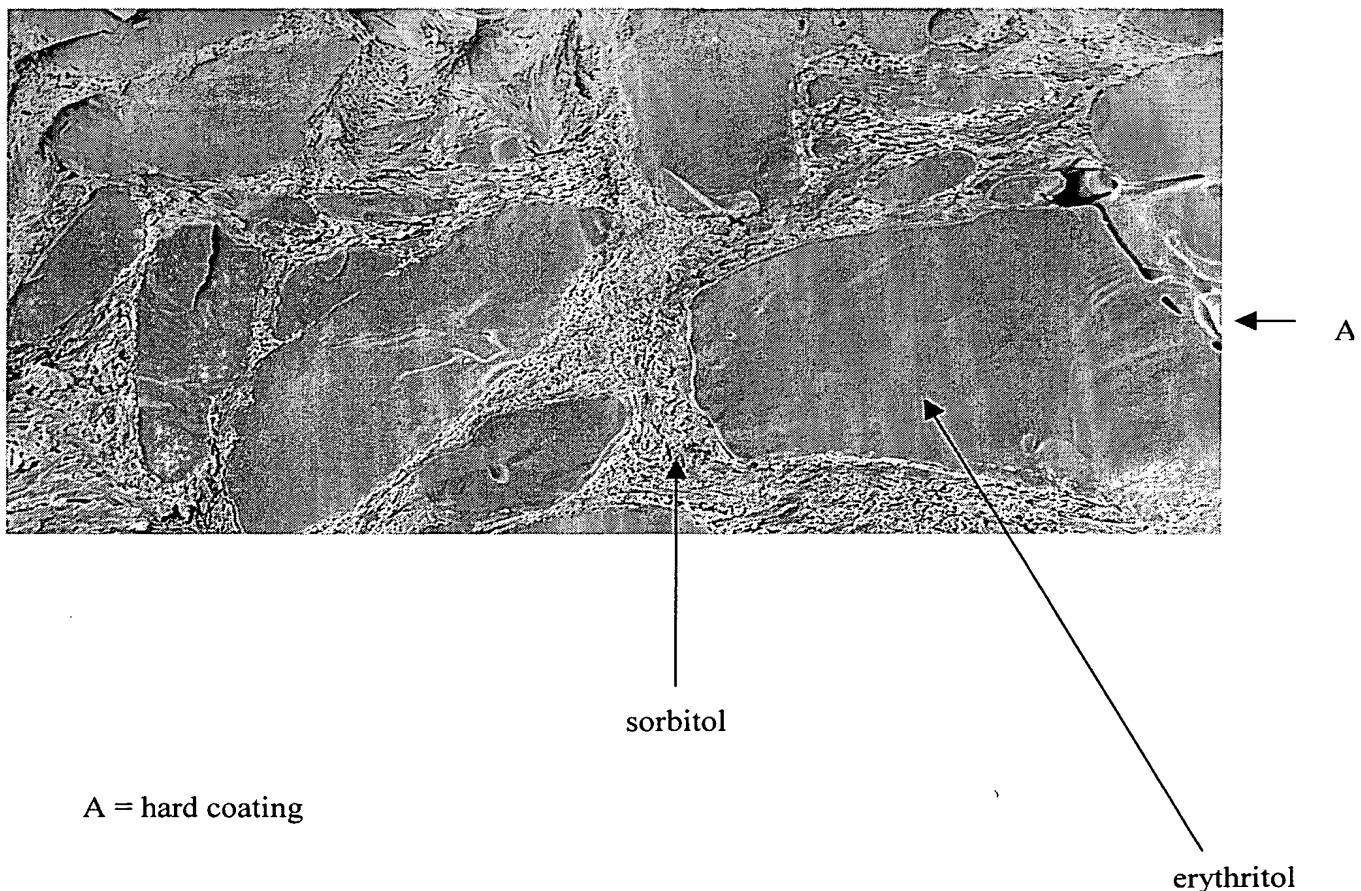
The coating solution was a sorbitol syrup with dry substance of 70% and a sorbitol-content of 97%. The syrup was applied to the cores at room temperature (20 - 25°C).

2 kg cores were in a rotating pan (speed 20 rpm, diameter 0.5m, velocity at outer circumference 1m/s). For the first ten layers 10 ml of sorbitol syrup was added. From layer twenty the amount was increased to 25 ml and from layer 37 it was further increased to 35 ml. Every fifth layer 1 min. after the addition of the sorbitol solution 0.57% (based on the weight of the centres) of C[☆]Eridex was added as a solid material.

The coating process was stopped after 40 layers.

Figure 1 corresponds to the hard coating prepared according to this process. The hard coating is heterogeneous and it is consisting of big erythritol crystals in the sorbitol matrix.

Figure 1



2. Hard coating prepared according to the subject patent application.

Panning conditions

To prepare the liquid mixture of sorbitol/erythritol 60/40 (trial 1), 11.2 kg erythritol (C★Eridex 16952) were mixed with 16.8 kg sorbitol (C★Sorbitex P16616) and 12 kg water. The resulting mixture was stored at 60°C.

The coating was performed in a pilot Driacoater.

50 kg cores, wherein the weight of uncoated centres was 0.9 g each, were rotating at 8 rpm and 0.6 kg of coating syrup was applied each time. The drying step was carried out by blowing air in at the bottom of the drying pan at 24°C.

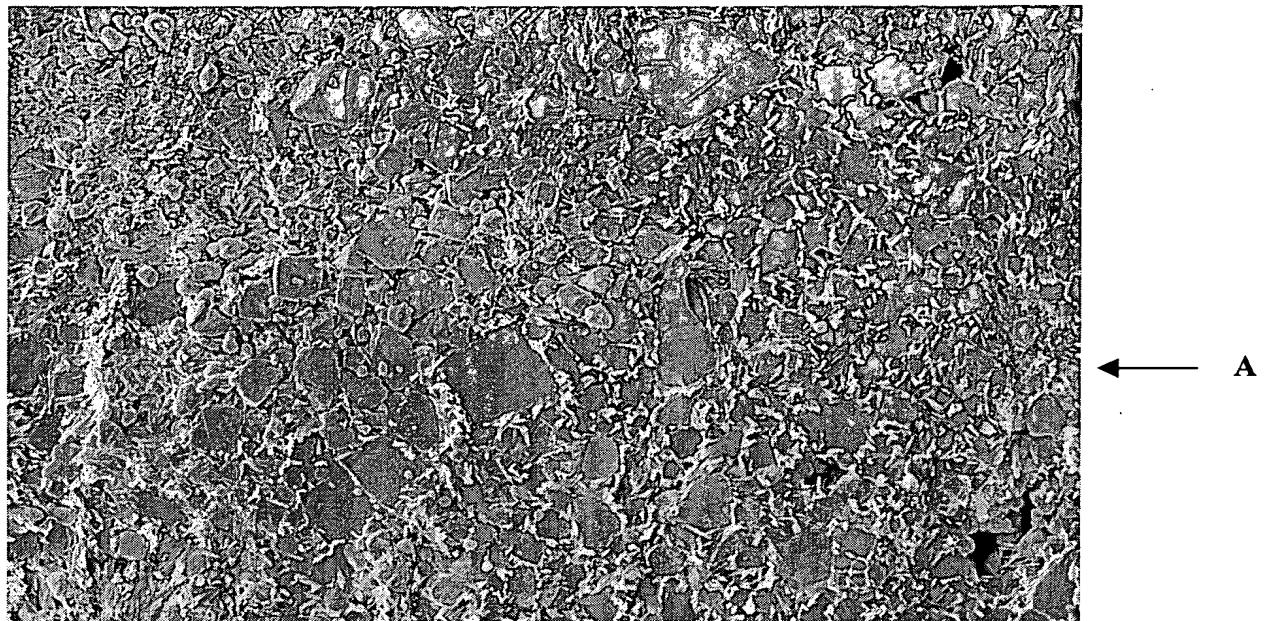
Further applied panning conditions are mentioned in Table 1.

Table 1

Conditions	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
Drying T(°C)	24	24	24	24	24	24	24
Total dosing (kg)	4.2	0.6	0.6	21.6	2.4	0.3	0.0
# kg/dosage	0.6	0.6	0.6	0.6	0.6	0.6	0.0
Smoothing t (sec)	25	60	25	60	240	300	300
Drying t (sec)	300	300	300	400	200	600	900

Figure 2 (magnification of 3000, same as for figure 1) shows that the hard coating is homogeneous and there is a uniform distribution.

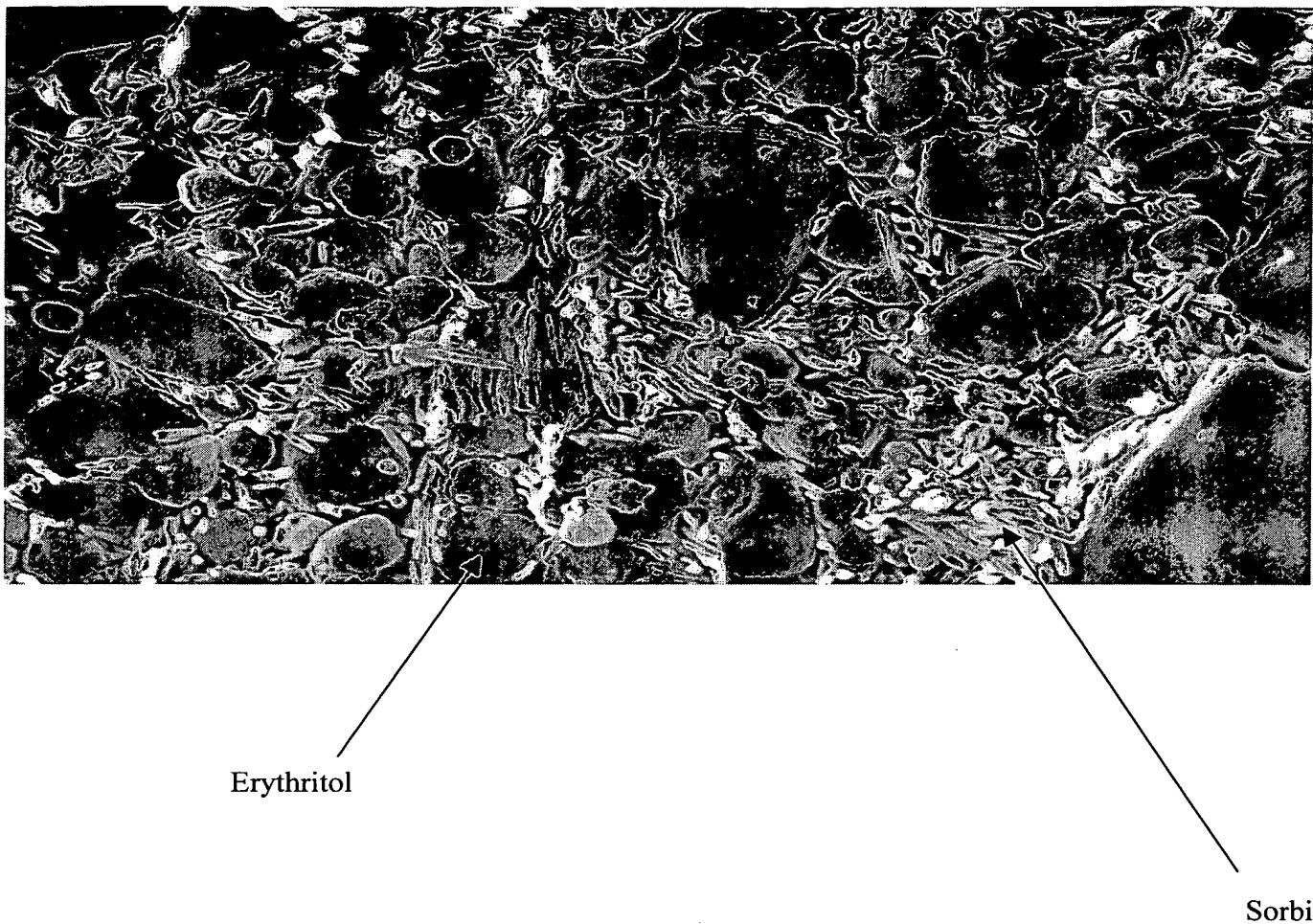
Figure 2



A = hard coating

Figure 3 displays another magnitude (10.00 Kx) and clearly demonstrates that the hard coating of the current invention is more homogeneous and uniform whereas the sorbitol matrix is displayed as crystal needles.

Figure 3



Conclusion:

- The hard coating prepared according to the current invention is homogeneous and there is a uniform distribution. This is clearly displayed in Figure 2.
- The hard coating prepared according to the method described by Rosenplenter is heterogeneous and it is consisting of big erythritol crystals in the sorbitol matrix. This is displayed in Figure 1. It is completely different from the hard coating prepared according to the current invention and displayed in figure 2.
- The products prepared according to the current invention are completely different from the products obtained by the method of Rosenplenter.